

REMARKS

In the Office Action, the Examiner rejected claims 1-31. The Examiner also stated that the oath was defective because it is missing an inventor's signature. By this paper, Applicants have added new claims 32-38 and amended claims 1-4, 7-9, 12-18, 21, 25, and 29-31. These amendments do not add any new matter. Upon entry of these amendments, claims 1-38 are pending in the present application and are believed to be in condition for allowance. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Oath/Declaration

In the Office Action, the Examiner stated that the oath was defective because "[t]he oath is missing the inventors' signature." Office Action, page 2. Applicants respectfully remind the Examiner that the Office of Petitions has granted Applicants' petition under 37 C.F.R. § 1.47 requesting the acceptance of an Application without the signature of all of the inventors. *See* Decision According Status under 37 C.F.R. 1.47(a) mailed January 7, 2003, a copy of which has been is attached for the Examiner's convenience. In light of this action by the Office of Petitions, Applicants respectfully submit that the oath, as filed, is sufficient.

Claim Rejections under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-23 and 25-31 under U.S.C. § 102(b) as anticipated by Leung et al. (U.S. Patent No. 6,272,577). Applicants respectfully traverse this rejection.

Legal Precedent

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Claims 1-15 and 25-31

Applicants respectfully assert that several features of independent claims 1, 9, and 25 are not disclosed by the Leung reference. For example, independent claim 1 recites a method comprising “sending a *multicast transaction* from the initiator device to the plurality of target devices.” (Emphasis added). Independent claim 9 recites a method comprising “detecting a *multicast transaction request*,” “accessing a first portion of memory... in response to the

multicast transaction request,” and “accessing a second portion of memory... in response to *the* multicast transaction request.” (Emphasis added). Independent claim 25 recites a “computer system for *multicast input/output transactions* comprising... an initiator device coupled to the communications bus for issuing a *multicast transaction*.” (Emphasis added).

In sharp contrast, the Leung reference clearly discloses non-multicast transactions. Specifically, as noted by the Examiner, the Leung reference discloses “a memory device in accordance with the present invention [that] provides *multiple commands*, one after another, to different arrays.” Leung, col. 25, lines 15-17. (Emphasis Added). In other words, the Leung reference discloses a system in which *individual and separate transactions* may be run *sequentially* on different memory arrays. *See* Leung, col. 25 lines 19-25. As such, the Leung reference does not disclose a multicast transaction, as recited in the claims above. For at least this reason, Applicants assert that the Leung reference cannot anticipate independent claims 1, 9, and 25, as well as the claims that depend thereon.

Claims 16-31

Applicants respectfully assert that several features of independent claims 16 and 25 are also not anticipated by the Leung reference. For example, independent claim 16 recites a computer system comprising a “plurality of target devices coupled to the communications bus, wherein each of the plurality of target devices is configured to *concurrently execute* a portion of the transaction request.” (Emphasis added). Independent claim 25 recites a computer system comprising “a plurality of target devices coupled to the communications bus, the plurality of

target devices configured to execute the multitask transaction with *concurrent interleaved data responses*.” (Emphasis added).

In sharp contrast, the Leung reference discloses a system in which memory transactions are executed consecutively *not concurrently*. See Leung, col. 25, lines 15-25. While the system disclosed in the Leung reference is capable of accessing multiple memory devices, each memory access must be initiated sequentially. See *id.*; col. 24, lines 27-32 (“multiple arrays participate in a *time-multiplex* manner. Each participating... in a *consecutive manner*.”) (Emphasis added). As such, the Leung reference cannot possibly anticipate the above-described claim features of independent claims 16 and 25. Accordingly, Applicants respectfully request withdrawal of the Section 102 rejections against independent claims 16 and 25, as well as the claims that depend therefrom.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claim 24 under 35 U.S.C. § 103(a) as obvious over Leung et al. (U.S. Patent No. 6,272,577) in view of Carmichael et al. (U.S. Patent No. 5,864,712). Applicants respectfully traverse this rejection. Applicants respectfully submit that claim 24 is allowable based on its dependency on claim 16, because the Carmichael reference does not cure the deficiencies described above in regard to the Leung reference. For this reason, claim 24 is believed to be allowable over the cited references taken alone or in combination with each other. Thus, Applicants respectfully request the withdrawal of the rejection of claim 24.

New Claims

Applicants respectfully request that new claims 32-38 be considered. The new claims are fully supported by the specification, and Applicants respectfully submit that the prior art of record does not disclose or suggest the recited subject matter of claims 32-38. For example, Applicants assert that neither of the cited references discloses a computer comprising “a plurality of devices, wherein each of the plurality of devices is associated with one of the interleaved memory regions and wherein each of the devices is configured to simultaneously access its associated memory region in response to a single transaction request,” as recited in claim 32; a method comprising “executing a memory access that simultaneously involves each of the plurality of target devices accessing the interleaved memory region associated with the particular target device,” as recited in claim 33; or a tangible medium comprising “code adapted to configure the plurality of devices to associate a base address with the plurality of devices,” as recited in claim 36. For at least these reasons, Applicants respectfully submit that new claims 32-38 are allowable over the cited references.

Conclusion

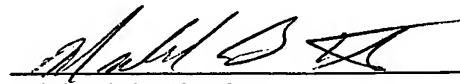
Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Authorization for Extensions of Time and Payment of Fees

In accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof. The Commissioner is authorized to charge the requisite fee of \$950.00 for additional claims, and any additional fees which may be required, to Deposit Account No. 08-2025; Order No. 200304299-1.

Respectfully submitted,

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